

## SECTION: SPECIFICATION AMENDMENTS

Please amend the Specification by entering the replacement paragraph or section, as follows, wherein added matter is underlined and deleted matter is ~~stricken through~~ or ~~[[double bracketed]]~~ in the text of the currently amended Specification/Abstract, relative to the immediate prior version.

### **On page 8, beginning at line 15:**

Referring also to **Figures 6 and 7**, the purging and inflation mechanism 12 basically comprises a valve 30, an air input assembly 31, a tire interface assembly 32, and a vacuum generator ~~32~~ 33. The valve 30 functions to control the inflation mechanism 12 and provide a purging mode and an inflation mode. The air input assembly 31 is communicatively connected to the valve 30 and provides a source of gas such as compressed air, Nitrogen gas, Argon gas, coolant type gases, or the like to the mechanism 12 via the valve 30. The later gases are relatively expensive. The mechanism is optimized for use of less expensive compressed air. In the preferred embodiment, the air input assembly 31 is adapted to be connected to an external source of gas, compressed air in particular. The tire interface assembly is communicatively connected to the valve 30 and functions to connect the mechanism 12, via the valve 30 to one or more tires or other articles which are to be purged of gases and impurities and/or inflated with pure gases. The vacuum generator ~~32~~ 33 is communicatively connected to the valve 30 and functions to provide a vacuum source with which to purge or evacuate the tires or other articles of gasses and impurities.

### **On page 11, beginning at line 5:**

Referring also to **Figures 10-14**, the vacuum generator ~~32~~ 33 is a venturi type generator which does not require a pump. An example vacuum generator ~~32~~ 33 is a Model P5V-GPN vacuum generator provided by Parker Hannifin Corporation of Wadsworth, Ohio USA. The vacuum generator ~~32~~ 33 is

compact and lightweight for mounting on the cart 11. Referring to **Figure 15**, it consumes minimal air (approximately 120 L/min) and generates high vacuum levels. The vacuum generator 32 has pressure port (P), exhaust port (E) and venturi port (V). Pressure port P is communicatively connected to valve 30 output port 2, preferably via hose 61. Venturi port V is communicatively connected to port 5 of valve 30, preferably via line 65. Exhaust port E is connected to an exhaust muffler 62. A fitting 63 is preferably connected in line 63 connecting the exhaust port E with muffler 62. An indicator gauge 66 is preferably connected to the vacuum generator ~~32~~ 33.

In use, the apparatus 10 has two modes, a purging mode and an inflation mode. Referring to **Figure 6**, one or more tires 57 are purged by connecting fitting 53 at a proximal end of each hose 13 to fitting 52 of manifold, and by connecting chuck 54 at a distal end of each hose 13 to a valve stem 55 of each subject tire 57. Tire 57 is pre-seated on a wheel, with or without a tube or other internal bladder. Preferably, the tire 57 is deflated and contains only ambient air at normal atmospheric pressure. Gas inlet line 45 connected to a source of pressurized gas such as compressed air or Nitrogen (not shown) is connected to inlet fitting 40 and pressurized gas is introduced. Gas pressure is controlled by actuating controller 46 on regulator 41 and visualizing pressure on gauge 47. Gas flows from regulator 41 to dryer 42 where moisture is removed. Gas flows from dryer 42 to filter 43 for filtering. Gas flows from filter 43 to valve 30. Valve 30 controller 6 is actuated to permit gas to from inlet port 1 to outlet port 2. Gas flows from the valve 30 to port P of vacuum generator ~~32~~33, and exits at port E to muffler 62 and then to the atmosphere. This creates a vacuum at port V. Actuation of controller 6 of valve 30 also connects port 5 to port 4. Since port 4 is connected to manifold 50, the vacuum at port V of the vacuum generator ~~32~~ 33 is applied to the manifold 50 via coupling line 65. The vacuum condition of the manifold 50 is applied to each subject tire 57 via an interconnecting hose 13.